MATHEMATICS

MATHEMATICS

LEARNING OUTCOMES BASED MODEL TEST ITEMS

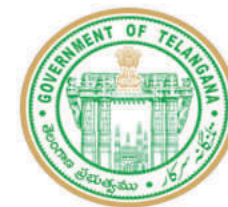## CLASS - 3

3

MATHEMATICS

CLASS III

State Council of Educational Research and Training
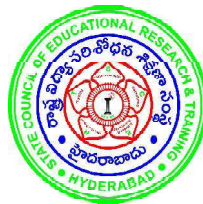**Telangana, Hyderabad**

The Government of Telangana

3ʳᵈ Class

Mathematics

Learning Outcomes
based

MODEL TEST ITEMS

State Council of Educational Research and Training,
Hyderabad, Telangana

FOREWORD

Imparting quality education involves ensuring that all the students have achieved the prescribed competencies and learning outcomes by the time they complete schooling. It's commendable that the government is taking steps to improve the quality of education through strategies and action plan to achieve class-specific and subject-specific Learning outcomes by the students.

In order to improve our position at the national level, there is an earnest need to improve the competencies of students through effective teaching learning process.Keeping in view, to support teachers in achieving these prescribed competencies and learning outcomes, SCERT has prepared Item banks for different subjects in English, Telugu and Urdu media.By clearly specifying learning outcomes and providing model items, teachers are given the tools they need to align their teaching strategies with the desired outcomes. This approach not only supports teachers but also empowers them to adapt their methods to suit the needs of their students effectively.

Efforts like these demonstrate a commitment to continuous improvement in education, aiming to elevate the quality of learning and ultimately enhance student learning outcomes. With dedicated support from educational institutions and stakeholders, the goal of achieving higher scores in assessments becomes more attainable.

I appreciate the Faculty of SCERT and the content developers for their untiring efforts in bringing out these Item banks which will be largely useful to teachers and students in getting the desired results. Further I thank Principal Secretary, Education Department, Commissioner, Department of School education and State Project Director, Samagra Shiksha for their unflinching determination to elevate the state's position by their continuous guidance and support.

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Director

SCERT, Telangana

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Guidelines

National Achievement Survey is a national level large-scale competency based assessment will be conducted to obtain information about the learning achievement of students of Classes **3ʳᵈ, 6ᵗʰ and 9ᵗʰ** studying in State Govt. schools, Govt. Aided schools, Private Unaided and Central Govt. schools. NAS does not provide scores for individual student/school.

The National Achievement Survey will be conducted in the month of November in Language, Mathematics & Environmental Studies for classes 3ʳᵈ& 6ᵗʰ and for class 9ᵗʰ in Modern Indian Language, Mathematics, Science, Social Science and English.The programme "Strategies and Action Plan" is designed to give awareness to the Teachers regarding question patterns and learning outcomes so that Teachers can ensure the achievement of class and subject specific learning outcomes of their students.

Guidelines to the teachers:

➢ It should be noted that **objective** of this programme is to **achieve subject- specific and class – specific learning outcomes by the students.**

➢ Identify the learning outcomes in each unit.

➢ Teaching learning process should be conducted in alignment with the achievement of learning outcomes.

➢ Classroom management should be done to encourage the students' active participation, questioning, doing activities,reflection and elaboration in the learning process.

➢ Priority should be given interactive method of teaching.

➢ Teachers can modify their teaching strategies according to their class-room situations.

➢ In regular period concentrate on the learning outcomes of the lesson taught and in special periods focus should be on any one of the learning outcomes.

➢ Identify the different patterns of questions related to the learning outcomes and make the students to practice them.

➢ Teachers should discuss the answers after completion of the mock tests.

➢ Teacher should maintain the list of the learning outcomes discussed in the class-room.

Guidelines to the Headmasters:

➢ School level special action plan should be prepared and implemented in the school.

➢ For conducting special class, ensure that daily one period is allotted. In that special class, practice on learning outcomes of one subject should be done. Cover all subjects in a week accordingly.

➢ Ensure that the designated special class is conducted smoothly as per plan.

➢ Ensure that learning outcomes should be covered in both regular and special periods.

➢ Review the progress of the students at school level after each mock test.

LO Number	LO Name
M301	Reads and writes numbers upto 999 using place value
M302	Compare the numbers up to 999 based on their place values
M303	Solves simple daily life problems using addition and subtraction of 3-digit numbers with and without regrouping.
M304	Constructs and uses the multiplication facts (uphill 10) in daily life situation
M305	Analyses and applies an appropriate number operation in the situation / context
M 306	Explains the meaning of division facts by equal grouping/sharing and finds it by repeated subtraction.
M309	Identifies and makes 2D shapes by paper folding, paper cutting, other dot grid using straight lines etc.
M312	Estimates and measures length and distance using standard units like centimeters or metres and identifies relationships.
M 317	Reads the time correctly to the hour using a clock/watch
M318	EXTENDS PATTERNS IN SIMPLE SHAPES AND NUMBERS
M319	Recording data using tally marks, represents pictorially and draws conclusion

1

Class : III   **Subject: Mathematics**

LO : M301

Reads and writes numbers upto 999 using place value

1. Ravi had two hundred rupee notes , five one rupee coins and eight 10 rupee notes. Then how much money does Ravi have?

    A) 852   B) 258   C) 285   D) 582

2. Which of the following represents expanded form of 230?

    A) 10+10+1+1+1   B)100+100+3.

    C) 100+10+3.   D) 100+100+10+10+10

3. What is the place value of 4 in 546?

    A) 4   B) 40   C) 400   D) 10

4. Identify the total value of the given currency.

    A) 206   B) 602   C) 251   D) 260

5. Observe the abacus and choose the right number from the given options.

    A) 381   B) 183

    C) 813   D) 138

6.   Numerical form of five hundred and nine is

    A) 590   B) 905   C) 509   D) 950

7.   593 , 658, 925, 246

    In which of the above numbers does 5 has the highest place value?

    A) 658   B) 593   C) 925   D) 255

2

8. Count the given bundles and loose sticks , and find the number which lies in the hundreds place
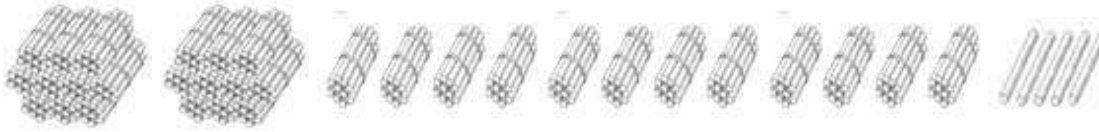
A) 4   B) 2   C) 5   D) 3

9. Express the number 508 in words

A) Five thousand eight   B) Fifty eight

C) Five zero eight   D) five hundred and eight

10. Which number comes before the number 620?

A) 6   B) 62   C) 619   D) 621

11. Expanded form of 349 …..

A) 30 + 400 + 9.   B) 3 + 40 + 900   C) 300 + 40 + 9   D) 30 + 4 + 900

Key

1. C   2.D   3. B   4. D   5.A   6. C   7.B   8. D   9. D   10. C   11. C

Explanation:

1. ₹ 100 notes = 2 = 2×100 = ₹ 200

   ₹ 1 coins. = 5 = 5 × 1 = ₹ 5

   ₹ 10 notes = 8 = 8 × 10 = ₹ 80

   200 + 5 + 80   = ₹ 285

2. In 230 there are 2 hundreds and 3 tens = 200 + 30 = 100 + 100 + 10 + 10 + 10

3. Digit 4 is in the tens place

   the place value of 4 is equal to 40

4. There are 2 hundred rupees, 1 fifty rupee and 1 ten rupee notes

   $(2 \times 100) + (1 \times 50) + (1\times10)$

   200+50+10 = ₹ 260

3

5. In the abacus

   Beads in hundreds place are $3 = 3 \times 100 = 300$

   Beads in tens place are $8 = 8 \times 10 = 80$

   Beads in units place are $1 = 1 \times 1 = 1$

   Number is $300 + 80 + 1 = 381$

6. five hundred and nine $= 500 + 00 + 9 = 500 + 9 = 509$

7. In 593, 5 is in hundreds place, so the place value of 5 is equal to 500

   In 658, 5 is in tens place, so the place value of 5 is equal to 50

   In 925, 5 is in units place, so the place value of 5 is equal to 5

   In 246, there is no 5

   Finally 5 has the highest place value in 593 from the given options.

8. Loose sticks are $5 \Rightarrow 5 \times 1 = 5$

   10's bundles are 12 $\Rightarrow$ 10 ten bundles + 2 ten bundles

   $\qquad\qquad\qquad$ = 1 hundred bundle + 2 ten bundles

   $\qquad\qquad\qquad$ (hundred bundle carries to hundreds place)

   100s bundles are $2 + 1$ (hundred bundles carried from tens bundle)

   So the hundreds are 3

9. Five hundred and eight

10. Predecessor of 620 is 619.

11. In 349 there are 3 hundreds, 4 tens and 9 ones means 3hundreds 4tens and 9 ones = $300 + 40 + 9$

4

LO : M302

Compare the numbers up to 999 based on their place values

1. Compare the given numbers using Correct symbol .

    A) <   B) =   C) >   D) < >

2. Which is bigger 53 and 76

    A) 53   B) 76   C) 13   D) Both are equal

3. The smallest three - digit number formed with the digits 7,8,0

    A) 780   B) 870   C) 708   D) 807

4.

According to the above information which statement is correct?

A) Rajesh has hundred rupees less than Raju

B) Raju has hundred rupees less than Rajesh

C) Rajesh has ten rupees less than Raju   D) Both have equal money

5

5. Compare the given numbers using correct symbol ($<$, $>$, $=$)

   505 ………. 550
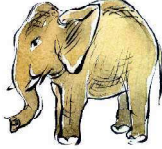
   A) $>$ B) $<$ C) $=$ D) A and C

6.

Animal	Weight (in Kg)
	128
	183
	523
	228

From the above table, arrange the names of animals according to their weights from heavier to lighter.

A) Pig, Bear, Lion, Elephant   B) Lion, Pig, Bear, Elephant

C) Elephant, Lion, Pig, Bear   D) Elephant,Bear,Lion,Pig

7. Identify the incorrect statement:

   1) 526 is less than 562

   2) 696 $>$ 669

   3) 706 $=$ 760

   4) 676 is greater than 667

   A) 1   B) 3   C) 2   D) 4

8. In a theatre, the number of audience attended on 4 days respectively is given below:

257 on 1st day

275 on 2nd day

246 on 3rd day

264 on 4th day

Arrange the days in ascending order based on the number of audience attended.

A) 1st day, 3rd day, 4thday, 2nd day

B) 3rdday, 2ndday, 4thday, 1stday

C) 3rd day, 1st day, 2nd day, 4thday

D) 3rd day, 1st day, 4th day, 2nd day

9.

H T O   H T O
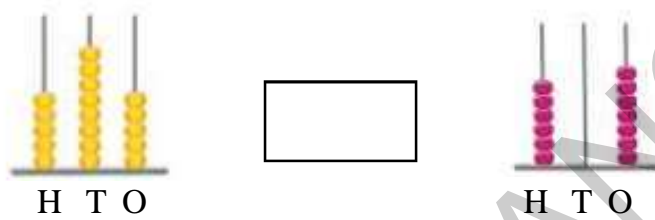
Choose the Correct symbol (<, >, =)

A) >   B) <   C) B and C   D) =

10.
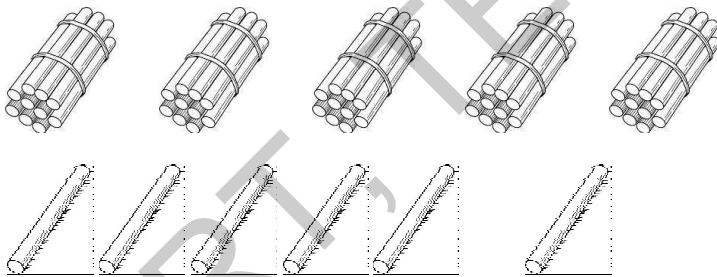
Count the given bundles and sticks and round off the number formed to the nearest tens.

A) 50   B) 70   C) 40   D) 60

Key

1. C   2.B   3. C   4. C   5.B   6. D   7.B   8. D   9. B   10. D

7

Explanation:

1. $23 - 6 = 17$ $18 - 7 = 11$

    17 is greater than 11 Or 17has1ten and 7ones11has 1 ten and 1ones. So17 is greater than 11Answer C is Correct. i.e., $17 > 11$

2. $76 > 53$

3. 708 is smallest number.We cannot take '0' in 100s place as it forms 2-digit number.

4. Raju has $400 + 30 + 2 = ₹ 432$

    Rajesh has $400 + 20 + 2 = ₹ 422$

    By comparing Raju's money with Rajesh's money, Rajesh has less ₹ 10 than Raju.

5. 505 is less than 550 So, $505 < 550$

6. By observing the weights of the animals given in the table, Arranging in descending order, $523 > 228 > 183 > 128$So, the order of the animals respectively will be:Elephant,Bear,Lion,Pig

7. $706 < 760$

8. Ascending order of the given numbers 246, 257, 264, 275 So, 3rd,1st,4th,2nd days are in ascending order

9. Abacus 1 :   Abacus 2 :

    5 Beads in 100s place = 500   6 Beads in 100s place = 600

    8 Beads in 10s place = 80.   0 Beads in 10s place = 0.

    5 Beads in 1st place = 5   8 Beads in 1s place = 8

      Number = 585   Number = 608

    $\boxed{585 < \ 608}$

10. 5tens + 6ones = $50 + 6 = 56$56 is nearest to 60.

8

LO : M303

Solves simple daily life problems using addition and subtraction of 3-digit numbers with and without regrouping.

1. There are 284 students in Bommena primary school and 242 students in Thandrial Primary School. How many students are more in Bommena Primary School ___

   A) 46   B) 526   C) 42   D) 284

2.

   What is the total value of the given currency notes?

   A) ₹ 660   B) ₹ 760   C) ₹ 880   D) ₹ 1000

3. Latha saved ₹ 456 and Sonu saved ₹ 348. How much money did they both save together?

   A) ₹ 804   B) ₹ 7914   C) ₹ 1011   D) ₹ 794

4. Vijay went to a shop to buy the following items. How much money does he need to buy them?

S no	Name of the item	Cost of the item
1	School bag	₹ 350
2	Compass box	₹ 120
3	Exam pad	₹ 80

   A) ₹ 450   B) ₹ 4150   C) ₹ 550   D) ₹ 650

9

5. Suresh has ₹ 300. Suresh bought a toy for ₹ 120 and a balloon for ₹ 20. How much money is left with him?

   A) ₹ 140   B) ₹ 440   C) ₹ 420   D) ₹ 160

6. In a book there are 384 pages. Raju read 146 pages in the book. How many pages are left to be read?

   A) 238   B) 530   C) 228   D) 248

7. Shami and Ramu are playing with 3-digit numbers.

   Shami gave the below sum and asked Ramu to fill the box with appropriate number. Which number would Ramu write?

   ```
        4  [    ]  8
   (–)  2    4    6
        ─────────────
        2    5    2
        ─────────────
   ```

   A) 1   B) 9   C) 5   D) 7

8. There are 109 students in Gambhirpur primary school in the month of June. In July month 23 new students have joined and 8 students have left the school. How many students are there at the end of July?

   A) 140   B) 124   C) 94   D) 109

9. Siri has 282 marbles. Viya has 35 marbles less than Siri. How many marbles does Viya have?

   A) 317   B) 253   C) 247   D) 322

10. There are 65 mangoes in a basket. How many mangoes are to be added more to the basket to get 99?

    A) 99   B) 164   C) 91   D) 34

Key

1) C   2) C   3) A   4) C   5) D   6) A   7) B   8) B   9) C   10) D

10

Explanation:

1. Number of students in MPPS Bommena= 284

   Number of students in MPPS Thandrial= _ 242

   ————

   4 2

   ————

   42 more students are more in MPPS Bommena school

2. $500 + 200 + 100 + 50 + 20 + 10 = ₹\ 880$

3.

```
  1  1
  4  5  6
  3  4  8
+————
  8  0  4
 ————
```

4.

```
  3  5  0
  1  2  0
     8  0
+————
   550
 ————
```

5. Suresh bought a toy and a balloon.

   Cost of a toy   120

   Cost of a balloon   20

   +————

   140

   ————

   Suresh has 300 rupees and he spent 140 rupees.

   So 300 -140 = 160

   Suresh is left with 160 rupees.

11

6. Number of pages in the book =   3 8 4

    Number of pages read by Raju = 1 4 6

$$\begin{array}{r} -\underline{} \\ 2\ 3\ 8 \\ \underline{} \end{array}$$

    Pages to be read = 238 pages.

7. Detailed Solution:

$$\begin{array}{r} 4\quad 9\quad 8 \\ 2\quad 4\quad 6 \\ -\underline{} \\ 2\quad 5\quad 2 \end{array}$$

8. Number of students in Gambhirpur primary school   1 0 9

    Number of students were joined in July   2 3

$$\begin{array}{r} +\underline{} \\ 1\ 3\ 2 \end{array}$$

    Number of students went to another school   8

$$\begin{array}{r} -\underline{} \\ 1\ 2\ 4 \end{array}$$

    There are 124 students at the end of the July month.

9. Number of marbles Siri has   =   2 8 2

    Viya has 35 marbles less than Siri   =   3 5

$$\begin{array}{r} -\underline{} \\ 2\ 4\ 7 \end{array}$$

    Viya has 247 marbles.

10. Number of mangoes in the basket=6 5

    Number of required mangoes=99

    More mangoes needed = 99 – 65 = 34

12

LO : **M304**

Constructs and uses the multiplication facts (uphill 10) in daily life situation

1. A chair has 4 legs. How many legs will 5 such chairs have?

    A) 9   B) 20   C) 5   D) 4

2. Which of the following is the same as $6 \times 4 =$ ….

    A) 64   B) 6 + 4

    C) 4 + 4 + 4 + 4 + 4 + 4   D) 6 + 6 + 6 + 6 + 6 + 6

3. Mahita eats 3 slices of an apple thrice a day. Tarani eats 4 slices of an apple every morning and 5 slices of an apple every evening. Who eats more apple slices in a day?

    A) Mahita   B) Tarani

    C) Both ate equal number of slices   D) it's not possible to compare

4. A fan has 3 blades . How many blades are there in 24 fans?

    A) 72   B) 27   C) 21   D) 9

5. A factory produces 30 bulbs in one hour and the factory worked for 9 hours. How many bulbs will be produced on that day?

    A) 27   B) 39   C) 720   D) 270

6. Saritha works at ice-cream shop. She gets Rs. 280 per day. If she worked for 5 days. how much amount does she get?

    A) ₹ 385   B) ₹ 1405   C) ₹ 1400   D) ₹ 10400

7. Varshita planted some plants in her backyard. Plants were planted in 5 rows and in each row she planted 4 plants . Then plants planted by Varshita can be expressed as:

    A) 5×4 B) 5+4   C) 5-4   D) $5 \div 4$

8. Which of the following statement is true based on the below figure?

    A) 8÷4   B) 8–4   C) 4×8 D) 8÷4

13
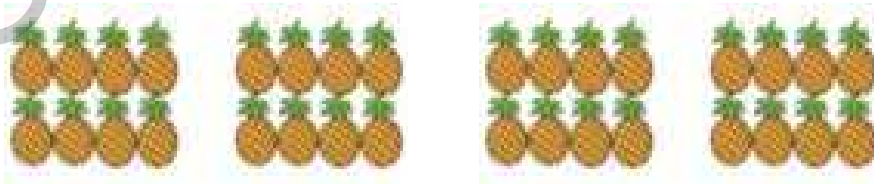
9. An auto has 3 wheels .How many wheels will be there for 6 autos?

    A) 9   B) 12   C) 6   D) 18

10. If we use 24 L of water per day, how many liters of water is required for a week ?

    A) 1428 L   B)168 L   C) 161 L   D) 1628 L

11.

    Which statement below represents the above picture

    A) 4+8   B) 4÷8   C) 4×8   D) 4×7

Key

1) B   2) C   3) C   4) A   5) D   6) C   7) A   8) C   9) D   10) B   11) C

Explanation:

1. A chair has 4 legs, 5 charis have 5×4=20 legs.

2. 6×4 means 6 times of 4= 4+4+4+4+4+4

3. Mahita eats 3 slices thrice a day that means 3times of 3 =3×3 =9

    Tarani eats 4 slices morning and 5 slices evening that means 4+5=9

        So both ate equal

4. A fan has 3 blades , blades in 24 fans means 24 times os 3 = 24×3= 72

5. Bulbs produced in one hour = 30

    Bulbs produced in 9 hours= 9×30= 270

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6. Money that Saritha gets per day = ₹ 280

   For 5days = 5× 280 = ₹ 1400

7. Number of rows   = 5

   Plants in 1 row   = 4

   Expressed as : 5×4

8. In the picture 4 groups are there and in each group has 8 pineapples.

   4×8

9. One auto has 3 wheels

   Total number of wheels for 6 autos = 6 times of 3= 6×3= 18

10. Water used in a day   = 24L

    Water needed for a week = 7 times of 24 = 7 × 24

$$
\begin{array}{r}
2 \\
24 \\
\times 7 \\
\hline
168 \text{ L} \\
\hline
\end{array}
$$

11. In the picture 4 rows of stars are there and each row has 8 stars= 4 × 8

15

LOS : M305

Analyses and applies an appropriate number operation in the situation / context

1. I am a two-digit number. My digit in ones place is equal to 1 less than 6. My digit in tens place is equal to 2 more than 2. Who am I?

    A) 47   B) 50   C) 45   D) 54

2. In Rishi's school, break time is for 30 min. If he takes 13 minutes to eat his food, how much time is left in the break?

    A) 27 min.   B) 23min.   C) 43 min.   D) 17 min

3. A teacher has 46 boxes of colour pencils. Each box has 6 colour pencils in it. How many colour pencils does she have in all?

    A) 276.   B) 52.   C) 460.   D) 246

4. There are some red and yellow balls in a bag. The number of red balls is 25 and the number of yellow balls is 5 times more than the number of red balls. How many balls are there in the bag?

    A) 30   B) 150   C) 125   D) 200

5. Ravi bought an ice cream that costs Rs. 46. If he gives a hundred rupee note to the ice cream seller, how much money will the ice cream seller give him back ?

    A) ₹.146.   B) ₹.56.   C) ₹.36.   D) ₹ 54

6. A baker made 28 cakes in the morning and 26 cakes in the afternoon. If he sells 9 cakes on that day, how many cakes are left unsold?

    A) 45   B) 54   C) 63   D) 11

7. A Squirrel jumps 3 steps at a time. How many jumps will it take to cover 27 steps?

    A) 7   B) 3   C) 9   D) 10

8. Vignesh, Mahesh, Suresh, Rajesh scored 3 goals each in a foot - ball match. How many goals did they score in all?

    A) 3   B) 12   C) 4   D) 7

9. Dushyanth has 23 marbles with him. He needs 50 marbles to play a game. How many more marbles should he collect to play that game?

    A) 37   B) 83   C) 50   D) 27

10. Kusuma's team planted 128 trees and Mahonnath's team planted 231 trees in their village. How can they find the total number of trees planted?

    A) 128 - 231   B) 231 -128   C) 128 + 231   D) 128×231

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```
                        Key
  1) C        2) D       3) A       4) B       5) D
  6) A        7) C       8) B       9) D      10) C
```

Explanation:

1. 6 – 1=5,

    So, the digit in one's place = 5

    2 more than 2 = 4

    So, the digit in tens place is = 4×10=40

    Number = 40+5 = 45

2. Rishi's school break time 30min

    Time that he takes to eat =13min

    Time left = 30-13=17 min

3. Number of boxes = 46

    Number of pencils in each box = 6

    Total number of pencils = 46×6= 276

4. Red balls = 25

    Yellow balls   = 5 times more than red balls

                              = 5×25 = 125

    Total balls   = 25+125= 150

5. Money with Ravi = Rs. 100

    Money spent = Rs. 46

    Money returned by the ice cream seller =100 – 46 = Rs. 54

6. Cakes made in the morning = 28

    Cakes made in the afternoon= 26

    Total number of cakes made = 28+26= 54

    Number of cakes sold = 9

    Number of cakes left = 54 - 9= 45

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7. Number of steps that the Squirrel takes in each jump= 3 steps

   To cover 27 steps, it needs to jump = $27 \div 3 = 9$ jumps

8. Goals scored by Vignesh =3

   Goals scored by Mahesh=3

   Goals scored by Suresh =3

   Goals scored by Rajesh = 3

   Total Goals scored = 4 times of 3 = $4 \times 3 = 12$

9. Number of marbles with Dushyanth = 23

   More number of marbles that he need to play the game = 50-23=27

10. Trees planted by Kusuma's team = 128

    Trees planted by Mahonnath's team = 231

    Total trees = 128+231

LO : M 306

Explains the meaning of division facts by equal grouping/sharing and finds it by repeated subtraction.

1.
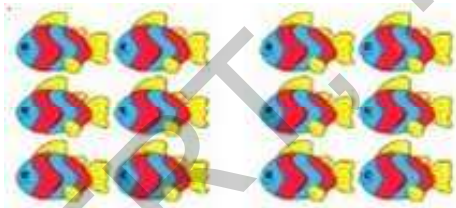
1. Two children shared the above toys equally. Find the number of toys that each one get.

   A) 12 B) 4 C) 6 D) 3

2. An egg tray holds 6 eggs. How many such egg trays are needed to hold 24 eggs?

   A) 4 B) 18 C) 30 D) 8

3. Sumaya has 36 chocolates. To how many friends can she distribute by giving 3 chocolates to each?

   A) 9 B) 8 C) 10 D) 12

18

4.
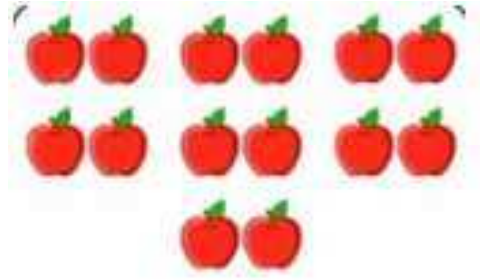
Share the above apples to 7 persons equally. How many apples do each person get?

A) 7   B) 2   C) 21   D) 3

5. There are 24 students in a class. 4 students can sit on a bench. Then how many benches are there in that class?

A) 6   B) 28   C) 12   D) 4

6. The cost of 5 pens is Rs. 35. What is the cost of one pen?

A) 8 rupees   B) 9 rupees   C) 10 rupees   D) 7 rupees

7. There are 18 stars. After making every 4 stars as a group, how many stars will be left

A) 1   B) 4   C) 2   D) 3

8. How many fans with 3 wings can be made using 48 wings?

A) 16   B) 18   C) 15   D) 45

9. Aditi has 36 roses. She wants to give 6 roses to each friend. 4 of her friends get roses. How many more friends are yet to get roses?

A) 3   B) 8   C) 2   D) 6

10. How many ten rupees are there in Rs. 800?

A) 10   B) 8   C) 70   D) 80

```
                        Key
    1) C    2) A    3) D    4) B    5) A    6) D    7) C

    8) A    9) C    10) D
```

19

Explanation:

1. 12 toys distributed to two children

    i.e $12 \div 2 = 6$

    So, each child will get 6 toys

2. One egg tray holds 6 eggs.

    Egg trays needed to put 24 eggs = $24 \div 6 = 4$

    So, number of egg trays are 4

3. Sumaya wants to distribute 36 chocolates to her friends equally.

    She gave 3 chocolates to each.

    So, number of friends = $36 \div 3 = 12$ friends.

4. 7 persons shared 14 apples equally.

    So, they get $14 \div 2 = 7$ apples.

5. 4 students can sit on 1 bench.

    Number of benches required for 24 students = $24 \div 4 = 6$ benches.

6. The cost of 5 pens is Rs. 35

    So, one pen cost is $35 \div 5 =$ Rs. 7

7. 18 stars divided into groups with 4 stars in each group.

    18-4= 14

    14-4=10

    10-4=6

    6-4 = 2

    So, 2 stars remain ungrouped.

8. Number of fans with 3 wings that can be made using 48 wings are

    $48 \div 3 = 16$

9. Aditi has 36 roses. She wants to give 6 roses to each of her friend.

    So Number of friends are $36 \div 6 = 6$ friends.

    4 friends came and took roses

    Number of friends yet to come are 6-4 = 2 friends.

10. Number of ten rupees in 800

    is : $800 \div 10 = 80$.

    So, there are 80 ten rupees in 800.

20

LO - M309

Identifies and makes 2D shapes by paper folding, paper cutting, other dot grid using straight lines etc.

1. Birthday cap looks like _____ shape:

   A) ☐   B) ▭   C) ◯   D) △

2.
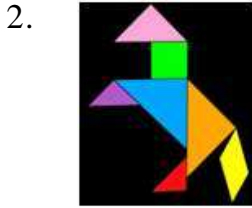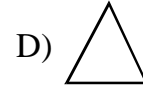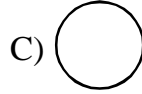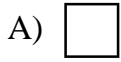
   Observe the above figure, how many △ are there?

   A) 3   B) 4   C) 5   D) 7

3. Which of the following objects is not in ▭ shape?

   A)   B)   C)   D)

4. How many least number of match sticks are needed to make the below shape:

   ▭

   A) 7   B) 8   C) 9   D) 6

5. Which shape is more in number in the below picture?

   A) △   B) ☐   C) ◯   D) ▭

21
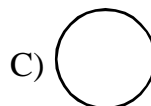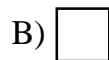
6. The black board in your class room looks like……………shape

A) ☐   B) ▭   C) ◯   D) △

7.
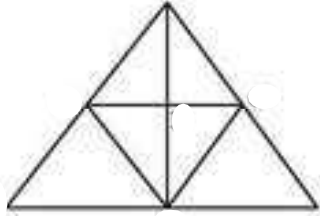
How many △ are there in the above figure?

A) 10   B) 11   C) 12   D) 13

8.
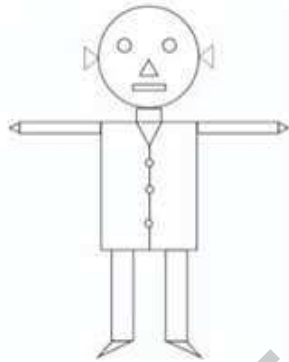
How many ▭ are there in the above figure?

A) 5   B) 6   C) 7   D) 8
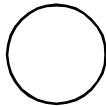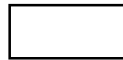
9. Transparent sheet:

(X)   (Y)   (Z)
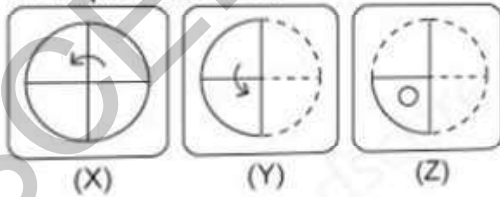
What is the shape formed when the paper is folded and cut as shown above?

A)   B)   C)   D)

22

10. Statement 1: The shape of the Bangle is ◯

Statement2: The shape of Samosa is ▭

Read the above statements and choose the Correct answer given below

A) Statement 1 is incorrect and 2 is Correct

B) Both are Correct statements

C) Both are incorrect statements

D) Statement 1 is Correct and 2 is incorrect

Key

1) D   2) C   3) C   4) D   5) D   6) B   7) D

8) C   9) D   10) D

Explanation:

1. Birthday cap looks like △ shape.

2. The figure has five △ shapes.
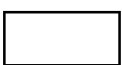
3. Biscuit, slate and book are in ▭ shape.

   Dice has ☐ shape So, option C is Correct

4. The least number of match sticks needed to form the above shape is 6.

5. More number of shapes is: ▭

6.

   Black board is in ▭ shape

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7. On counting, there are 13 △ shapes.

8. There are 7 ▭ in the above figure.

9. We folded paper in to 4 parts so the shape formed
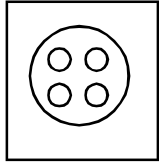
10. Bangle shape is ◯
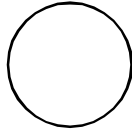
    Samosa shape is △

    ∴ option D is correct

24

LO : M312

Estimates and measures length and distance using standard units like centimeters or metres and identifies relationships.

1. Sathwik wants to measure the length of his paint brush using match sticks. Which is the correct way of measuring its length?

   A)

   B)

   C)

   D) A, B, C

2. Four friends are making towers using blocks. Pranitha made a tower of height 1m 22cm height. Kusuma made a tower of height 2m, Sanvi made a tower of height 98 cm and Nethra made a tower of height 150 cm. Arrange their names according to the towers' heights from tallest to shortest.

   A) Pranitha > Kusuma > Sanvi > Nethra.

   B) Nethra > Sanvi > Pranitha > Kusuma

   C) Sanvi > Pranitha > Kusuma > Nethra.

   D) Kusuma > Nethra > Pranitha > Sanvi

3. Purna is 84cm tall. Krishna is 4cm taller than Purna. What is the height of Krishna?

   A) 4cm   B) 88cm.   C) 84 cm   D) 80cm

4. The length of the pencil is 5 erasers long. The length of the book is 2 such pencils long. What would be the length of the book when measured by the eraser?

   A) 2 erasers   B) 5 erasers   C) 10 erasers   D) 3 erasers

5. Kamala has a rope of 104 cm length and Kavya has a rope of 1m and 4 cm length. Whose rope is longer?

   A) Kavya.   B) Kamala.   C) Both are same   D) 104 < 1m 4 cm

6. Moksha's height is 128 cm. Her height in meters and centimeters is

   A) 12 m. 80 cm   B) 1m. 28 cm.   C) 12 m. 8 cm.   D) 120 m. 8 cm.

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7. Length of the given spoon is …
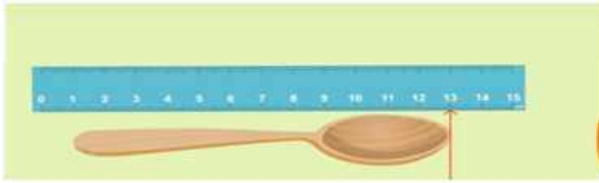
A) 12cm.   B) 13 cm.   C) 15 cm.   D) 1cm

8. A snail walked a distance of 300 cm and a tortoise walked a distance of 30 m. Who walked more?

A) Tortoise

B) Snail.

C) Snail walked 270 cm more than Tortoise

D) Both are same

9. 1 m 20 cm _____ 90 cm

Choose correct symbol in the blank

A) =   B) <   C) >   D) < and >

10. Four years ago, Sahasra's height was 85 cm. Now her height increased 32 cm more. What is Sahasra's height now?

A) 1m 20cm.   B) 1m 17cm.   C) 1m 32cm.   D) 85 cm

Key				
1) B	2) D	3) B	4) C	5) C
6) B	7) A	8) A	9) C	10) B

Explanation:

1. Option B is the correct way to measure

2. 1m= 100cm

Height of the towers made by:

Pranitha - 122cm

Kusuma - 200cm

Sanvi tower - 98cm

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Nethra tower - 150cm

So, height of the towers from tallest to shortest = 200 > 150 > 122 > 98

Names of the children who made from tallest to shortest = Kusuma, Nethra, Pranitha, Sanvi

3. Purna's height =84 cm

    Krishna's height is 4cm more than Purna's height

    Krishna's height = 84+4=88cm

4. Length of the pencil is 5 erasers

    Length of the book is 2 pencils = 2 times of 5 erasers=10erasers.

5. 1m = 100cm

    Length of Kamala's rope = 104cm= 100+4 =1m 4 cm= Length of Kavya's rope

6. 1m = 100cm

    128cm = 100+28 cm= 1m 28cm

7. We should measure any object from 0 cm on the scale.

    In the picture, spoon is measured from 1cm but not from 0 cm. So, the length of the spoon is 12 cm.

8. 1m = 100cm

    Snail walked 300cm = 3m

    Tortoise walked = 30m

    Tortoise walked more distance.

9. 1 m= 100cm

    1 m 20cm= 100+20 cm= 120cm

    120 cm is greater than 90 cm

    i.e., 1m 20 cm > 90 cm

10. 4 years ago Sahasra's height = 85 cm

    Sahasra's height increased by 32cm

    Now, Sahasra's height = 85 + 32=117cm

    That means 1m 17 cm

27

LO: M 317

Reads the time correctly to the hour using a clock/watch

1. What time does the following clock show?

A) 6 o' clock   B) 12 o' clock   C) 9 o' clock   D) 8 o' clock

2. Adhya started walking at 5 o' clock and stopped walking at 7 o' clock. How many hours did she walk?

A) 2 hours   B) 5 hours   C) 3 hours   D) 6 hours

3. Identify the wrong matching

1.   3 o' clock

2.   12 o' clock

3.   6 o' clock

4.   8 o' clock

A) 1   B) 2   C) 3   D) 4

28
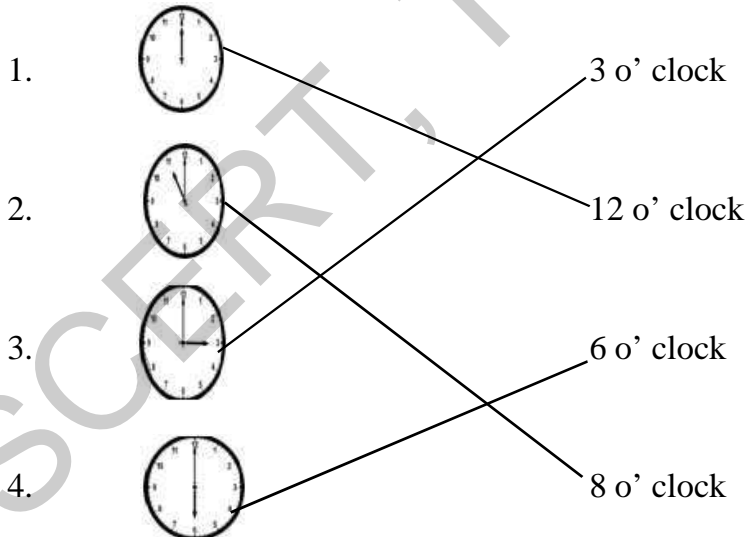
4. Suma's school starts at 9 o' clock but one day she came to school late by 1 hour. At what time did Suma come to school that day?

A) 8 o' clock   B) 11 o' clock   C) 7 o' clock   D) 10 o' clock.

5. A school opens at 9 o'clock and closes at 4 o'clock. Suresh spent 4 hours in the school and went home as he was sick. How many hours did he miss the school?

A) 7 hours   B) 5 hours   C) 3 hours   D) 6 hours

6. Which clock does not show 3 o' clock ?

1   **2**   **3**   **4**

A) 2   B) 3   C) 1   D) 4

7. Aditi left school at 4 O' clock. After playing for 2 hours with her friends she came home. At what time did she come home?

A) 7 O' clock   B) 6 O' clock   C) 8 O' clock   D) 5 O' clock

8. A movie starts at 11 O' clock and ends at 2 O' clock. How much time did the movie run?

A) 4 hours   B) 3 hours   C) 2 hours   D) 5 hours

9. What is the time before 2hours than the time shown in the below clock?

A) 6 o' clock   B) 7 o' clock   C) 8 o' clock   D) 12 o' clock

10. Rashmitha started drawing a picture at Morning 10 o' clock and finished it at Afternoon 1 o' clock. How much time did she take to draw the picture?

A) 1 hour   B) 2 hours   C) 4 hours   D) 3 hours

```
                        Key
1) C        2) A        3) B        4) D        5) C
6) A        7) B        8) B        9) A        10) D
```

Explanation

1. Long hand is at 12 and the short hand is at 9. So, the time is 9 o' clock.

2. Time that Adhya started walking = 5 o' clock

   Time that Adhya ended walking = 7 o' clock

   Total time she walked = time difference

   between 5 o'clock and 7 0'clock = 2 hrs

3. Clock 1 – 12 o'clock

   Clock 2 – 11 o'clock

   Clock 3 – 3 o'clock

   Clock 4 – 6 o'clock

   So, Clock 2 is matched wrong

4. Time that the school starts = 9 o' clock

   She was late by 1 hour

   Time that she came to the school = 1 hour

   added to 9 o'clock = 10 o' clock

5. Total school run time = school run time is from morning 9 o'clock to evening 4 o'clock = 7 hours

   Suresh spent only 4 hours

   Number of hours he missed the school = 7 hours – 4 hours = 3 hours

6. Clocks 1, 3 and 4 have their long hands at 12 and short hands at 3, so they are showing 3 o'clock.

30

Clock 2 has its long hand at 3 and short hand at 12, it is not showing 3 o'clock.

7. Time that Aditi left from school = 4 o'clock

   Number of hours she played after school = 2 hours

   Time she came home = 2 hours added to 4 o'clock = 6 o'clock.

8. Starting time of the movie = 11 o'clock

   Ending time of the movie = 2 o'clock

   Duration of the movie = from 11 o'clock to 2 o'clock is 3 hours

9. The above clock is showing 8 o'clock

   The time before 2 hours than 8 o'clock is 6 o'clock.

10. Duration between 10 o' clock and 1 o' clock is 3 hours

31

LO : M318

EXTENDS PATTERNS IN SIMPLE SHAPES AND NUMBERS

1. Observe the given figures given below: Find the next figure.

A)   B)   C)   D)
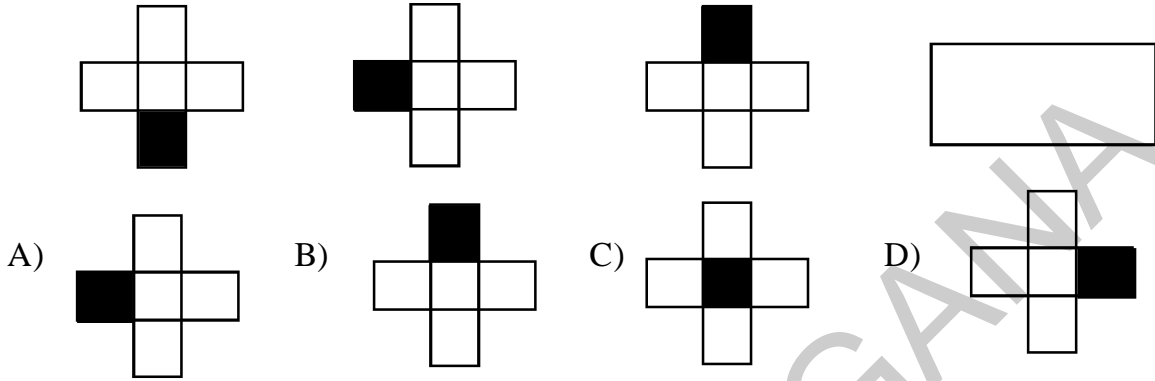
2. Observe the given Pattern………………What comes in the empty box?

A)   B)   C)   D)

3. Which of the following is in a pattern?

A) 3, 6, 8, 12, 15 B) 10, 8, 6, 2, 4 C) 5, 10, 15, 25, 30 D) 30, 24, 18, 12, 6

4. Observe the below pattern and identify the two figures that comes next.

A)   B)   C)   D)

5. Observe the figures……Find the next one.

A)   B)   C)   D)

32
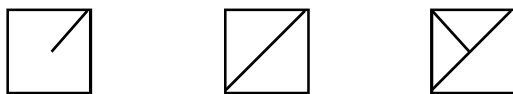
6. Z 2, Y 4, X 6, …………. Find the next one

   A) W 6   B) U 8   C) W 8   D) V4

7. Observe the figures given below. The next one is…….?

   A)   B)

   C)   D)
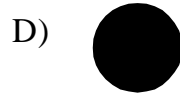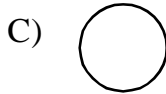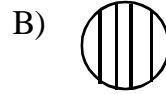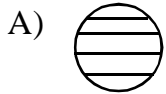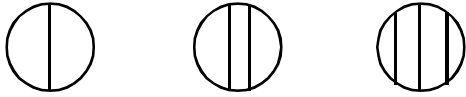
8. 9, 19, 29, 39, ………, Find the next number.

   A) 59   B) 69   C) 49   D) 79

9. Which of the following is not in a pattern?

   A) 30, 35,40 ,45 ,50   B) 12, 18, 24 ,30, 36

   C) 90, 80, 70, 60, 50   D) 4, 8, 12, 17, 20

10. Look at the pattern given below

    Next one is ………….

    A)   B)   C)   D)
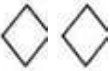
Key				
1) D	2) D	3) D	4) C	5) D
6) C	7) B	8) C	9) D	10) B

33

Explanation:

1. The shaded part is moving clock wise in the above figures. So, the answer is D

2. If we observe the figure the arrow mark moves anti clock wise. So, option D is Correct

3. Observe all the above patterns. A is multiples of 3, 9 is missing. B is descending order of 2 multiples…. in this 4 comes after 6 but it comes after 2. C is multiples of 5, 20 is missing. D is multiples of 6. All are in correct pattern, so D is correct.

4. ◇ ◇ pattern is repeated. So, Option C is Correct.

5. Adding one line to the figure each time, the answer is D.

6. Alphabets are in Descending order, Numbers are in Ascending order and 2 multiples So, the answer is W8.

7. Lines are increasing in the circle. So, B is Correct

8. The series is adding 10. So, 39+10 = 49

9. The pattern should be 4, 8, 12 ,16, 20. But in the pattern the number 16 is missing. So Option D is incorrect.

10. B) ■

34

LO : M319

Recording data using tally marks, represents pictorially and draws conclusion

1. Ramya collected information from her classmates about their favorite food items and prepared a table. Observe the given table and give the correct answer.

FOOD ITEMS	No. Of children who liked	Tally marks
Laddoo	6	I I I I I I
Badusha	8	IIIIIIII
Ice-cream	4	IIII
Cake	3	III
Rasagulla	5	IIIII

Which is the most favourite food item liked by them?

A) Cake   B) Rasagulla   C) Ice-cream   D) Badusha

2. Class wise strength of Ramaram Primary School is given below:

       = 3 students

CLASS	STRENGTH
1ˢᵗ CLASS	😊 😊 😊 😊 😊
2ⁿᵈ CLASS	😊 😊 😊 😊
3ʳᵈ CLASS	😊 😊 😊 😊 😊 😊
4ᵗʰ CLASS	😊 😊 😊
5ᵗʰ CLASS	😊 😊 😊 😊

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How many students are there in 3rd Class?

A) 6   B) 12   C) 18   D) 24

3. The toys available in toy shop are shown in given table, observe it and give the correct answer

Name	Toy
Aero plane	
Car	
Teddy bear	
Drums	

How many Teddy bear toys are more than Toy cars?

A) 8   B) 6   C) 9   D) 7

4. Ramu collected and recorded the information from 3rd class.

Observe the given table:

FAMILY SIZE	NO. OF FAMILIES
2 members	IIIIIIIIII
3 members	IIIIIIIII
4 members	IIIII
5 members	IIII
6 members	III

36

How many families have only 3 members?

A) 4   B) 8   C) 9   D) 5

5. The Given Table shows the different types of fruits available in Anil"s shop

Fruit Name	Number of fruits
APPLE	
MANGO	
BANANA	
WATER MELON	
POMEGRANATE	
ORANGE	

Which fruits are more in number and how much more when compared to that of Oranges?
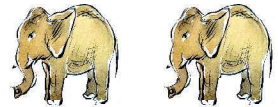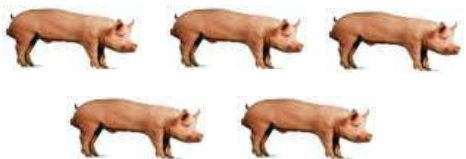
A) Mangoes, 5 are more

B) Apples, 8 are more

C) Apples, 7 are more

D) Apples, 6 are more

37

6. Match the pictures with correct Tally marks:

	PICTURES	TALLY MARKS
1.		A. IIII
2.		B. III
3.		C. IIIII
4.		D. II
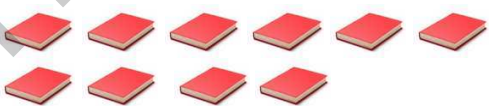
A) 1-B, 2-A, 3-D 4-C   B) 1-B, 2-D, 3-A, 4-C

C) 1-B 2-D, 3-C, 4-D   D) 1-D, 2-B, 3-A, 4-C

7. Observe the number of books sold by a shopkeeper in a week given in the table.

NAME OF THE DAY	Number of books sold
1.Monday	
2.Tuesday	
3. Wednesday	
4. Thursday	
5. Friday	
6.Saturday	

What is the difference between the highest sold and the lowest sold number of books?

A) 5   B) 6   C) 7   D) 9

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8. Observe the types of houses in Rangapur village:

TYPES OF HOUSES	TALLY MARKS
	~~IIII~~ ~~IIII~~ ~~IIII~~ III
	~~IIII~~ ~~IIII~~ ~~IIII~~ ~~IIII~~ IIII
	~~IIII~~ ~~IIII~~ II

How many huts are more than Bungalows?

A) 7   B) 6   C) 5   D) 8

9.

FLOWER PLANTS IN A GARDEN	
FLOWER PLANT	TALLY MARKS
ROSE PLANT	~~IIII~~ ~~IIII~~ III
LILY PLANTS	~~IIII~~ ~~IIII~~
MARIGOLD PLANTS	~~IIII~~ II
JASMINE PLANTS	~~IIII~~ III

Observe the table and give the correct answer.

Arrange the flower plants in Descending order according to tally marks

39

A) Rose, Lily, Marigold, Jasmine   B) Rose, Marigold, Lily, Jasmine

C) Rose, Jasmine, Marigold, Lily   D) Rose, Lily, Jasmine, Marigold

10. The number of people in different professions in Ramavaram village is given in the following table

PROFESSION	NUMBER OF PEOPLE	TALLY MARKS
TEACHER	12	ЖІ ЖІ ІІ
DOCTOR	6	ЖІ І
FARMER	23	ЖІ ЖІ ЖІ ЖІ ІІІ
CARPENTER	8	ЖІ ІІІ
TAILOR	5	ЖІ

According to the above information which professional is more in number?

A) Teacher   B) Doctor   C) Carpenter   D) Farmer

Key
1) D	2) C	3) B	4) B	5) D
6) B	7) C	8) B	9) D	10) D

40

Explanation

1) Bhadusha is liked by 8 children. So, Bhadusha is the most favorite food items as per the above list.

2) 1 figure is equal to 3 students.

   There are 6 figures in the 3rd class row

   So total students in the class 3 x 6 = 18

3) Teddy bear toys =12

   Car toys =6

   So, teddy bears toys are 6 more than car toys.

4) IIIIIIII = 8

5) According to above table Apples are more

   We compare Apples with oranges

   Oranges are 8

   Apples are 14

   So, apples are 6 more than oranges.

6) Lion pictures =3

   Elephant pictures =2

   Bears pictures =4

   Pig pictures =5

   So, 1-B 2-D, 3-A, 4-C Is Correct Answer

7) Maximum sale on Wednesday =12

   Lowest sale on Tuesday =5

   Difference between highest and lowest sale=7

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8) Huts are 18 and Bungalow houses are 12. So, huts are 6 more than Bungalow houses

9) Rose plants=13

Lily plants=9

Marigold plants=7

Jasmine plants=8

So Descending order of the plants

Rose, Lilly, Jasmine, Marigold is the correct answer

10) There are 23 farmers in the table so farmers are more in number.

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